

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
12 September 2002 (12.09.2002)

PCT

(10) International Publication Number  
**WO 02/070537 A3**

(51) International Patent Classification<sup>7</sup>: **C07J 53/00**,  
9/00, A61K 31/575, A61P 31/04

(21) International Application Number: PCT/DK02/00132

(22) International Filing Date: 28 February 2002 (28.02.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/273,950 8 March 2001 (08.03.2001) US

(71) Applicant (for all designated States except US): **LEO PHARMA A/S** [DK/DK]; Industriparken 55, DK-2750 Ballerup (DK).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **DUVOLD, Tore** [NO/DK]; Bille Brahes Vej 12, 3.tv, DK-1963 Frederiksberg C (DK).

(74) Agent: **CONRAD, Lars, Sparre**; Patent Counsel, LEO Pharma A/S, Industriparken 55, DK-2750 Ballerup (DK).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
7 November 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 02/070537 A3

(54) Title: FUSIDIC ACID DERIVATIVES

(57) Abstract: Novel 17,20-methanofusidic acid derivatives are used in pharmaceutical compositions for the treatment of infections, in particular in topical compositions for the treatment of skin or eye infections.

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/DK 02/00132

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07J53/00 C07J9/00 A61K31/575 A61P31/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07J A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 162 259 A (WELF VON DAEHNE ET AL) 24 July 1979 (1979-07-24) the whole document -----	1-23

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"g" document member of the same patent family

Date of the actual completion of the international search

2 September 2002

Date of mailing of the international search report

17 09. 2002

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3018

Authorized officer

Anna Sjölund

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/DK 02/00132

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: **18-19**  
because they relate to subject matter not required to be searched by this Authority, namely:  
**see FURTHER INFORMATION sheet PCT/ISA/210**
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Claims Nos.: 18-19

Claims 18-19 relate to methods of treatment of the human or animal body by surgery or by therapy/diagnostic methods practised on the human or animal body/ Rule 39.1.(iv). Nevertheless, a search has been executed for these claims. The search has been based on the alleged effects of the compounds/compositions.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/DK 02/00132

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4162259 A	24-07-1979	GB 1565954 A	23-04-1980
		AT 343810 B	26-06-1978
		AT 887576 A	15-10-1977
		AU 501066 B2	07-06-1979
		AU 1986876 A	01-06-1978
		CA 1079267 A1	10-06-1980
		DE 2654508 A1	08-06-1977
		DK 539476 A ,B,	04-06-1977
		ES 453853 A1	16-01-1978
		FI 763473 A ,B,	04-06-1977
		FR 2333807 A1	01-07-1977
		GR 62007 A1	15-02-1979
		IE 44263 B1	23-09-1981
		IT 1074295 B	20-04-1985
		JP 52071459 A	14-06-1977
		LU 76313 A1	21-06-1977
		NL 7613445 A	07-06-1977
		NZ 182661 A	11-07-1979
		PT 65925 A ,B	01-01-1977
		SE 410859 B	12-11-1979
		SE 7613565 A	04-06-1977
		SU 679146 A3	05-08-1979
		US 4315004 A	09-02-1982
		US 4100276 A	11-07-1978
		YU 291176 A1	31-05-1982
		BE 848961 A1	01-06-1977
		ZA 7607040 A	26-10-1977